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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,831	02/19/2002	Ernesto Colizzi	Q68186	6328

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
MAIS, MARK A	
ART UNIT	**PAPER NUMBER**
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/049,831	COLIZZI ET AL.	
	Examiner	Art Unit	
	Mark A. Mais	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12,13 and 23-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12,13 and 23-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 12, 23, and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Specifically, the claims refer to an external command given for failure signaling and suppression. The specification discloses only in-band signaling contained in the overhead of the transmitted frames. For examination purposes, "external command" is interpreted as in-band signaling.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 12 and 23 recites the limitation "said external command." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 12, and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kremer (USP 5,442,620).

7. With regard to claim 12, Kremer discloses a method for signaling failures in a ring network comprising a plurality of network elements and a plurality of fiber spans connecting the network elements in a ring configuration such that one network element is connected via said fiber spans to an adjacent network element on a west side and to another adjacent network element on an east side, the fiber spans comprising incoming and exiting working channels on each side of said one network element for carrying information traffic and incoming and exiting protecting channels on each side of said one network element for protecting said information traffic **[Fig. 9, 4-fiber protection network 100]**, the method comprising the steps of

detecting a failure affecting incoming and working protection channels on the east side of said one network element **[both transmission paths (working and protection paths) 110 and 120 (between nodes 101 and 102) fail, col. 8, lines 11-13; node 101 detects loss of signal, col. 8, lines 13-14]**,

transmitting from the west side of said network element an indication of a performed ring switch for protecting information traffic over said failed working channel on the east side **[Fig. 9, ring node 101 sends line switch message SFL 102 along the long path, col. 8, lines 17-22]**,

receiving a command for requesting suppression of said ring switch **[this is interpreted as the failed attempt for node 101 to send a line switch message via the failed route 110 towards the failure (if 110 did not fail, it would suppress switching between nodes 101 and 102 via path 110)]**;

maintaining said performed ring switch **[both nodes 101 and 102 perform loop-back routing, col. 8, lines 39-44; col. 9, lines 11-16]**; and

transmitting from said west side an indication of said performed ring switch and of said external command **[it is inherent in K1/K2 line switching that an acknowledgement is sent after receiving a line switch request utilizing in-band signaling (using path overhead bytes)]**.

8. With regard to claim 23, Kremer discloses a method for managing a protection mechanism in a ring network, wherein a network element is connected to an adjacent network element on a west side and to another adjacent network element on an east side, each side including incoming and exiting working channels for carrying information traffic and including incoming and exiting protection channels for protecting said information traffic **[Fig. 9, 4-fiber protection network 100]**, the method including the steps of:

detecting a failure affecting incoming working and protection channels on the east side of said network element **[both transmission paths (working and protection paths) 110 and 120 (between nodes 101 and 102) fail, col. 8, lines 11-13; node 101 detects loss of signal, col. 8, lines 13-14]**;

transmitting from the west side of said network element an indication of a performed ring switch for protecting information traffic over said failed working channel on the east side **[Fig. 9, ring node 101 sends line switch message SFL 102 along the long path, col. 8, lines 17-22]**;

receiving a command for requesting suppression of said ring switch **[this is interpreted as the failed attempt for node 101 to send a line switch message via the failed route 110 towards the failure (if 110 did not fail, it would suppress switching between nodes 101 and 102 via path 110)]**;

maintaining said performed ring switch **[both nodes 101 and 102 perform loop-back routing, col. 8, lines 39-44; col. 9, lines 11-16]**; and

transmitting from said west side an indication of said performed ring switch and of said external command **[it is inherent in K1/K2 line switching that an acknowledgement is sent after receiving a line switch request utilizing in-band signaling (using path overhead bytes)]**.

9. With regard to claim 24, Kremer discloses receiving said indication at said adjacent network element **[it is inherent in K1/K2 line switching that an acknowledgement is sent after receiving a line switch request utilizing in-band signaling (using path overhead bytes); i.e., node 102 performs loop-back routing, col. 8, lines 39-44]**;

in case of detecting another failure affecting incoming working and protection channels on the west side of said adjacent network element, maintaining said performed ring switch, otherwise suppressing said ring switch **[this is inherent for node 101. If the transmission paths 110 and 120 between nodes 101 and 104 also failed (in addition to paths 110 and 120 failing between 101 and 102), there could be no switch to the long path or loop-back routing available to nodes 101 and 102 (i.e., it would be suppressed)]**.

10. With regard to claim 25, Kremer discloses that in case of detecting said other failure, transmitting from the east side of said adjacent network element another indication of said performed ring switch, otherwise transmitting another indication for requesting suppression of said ring switch **[this is inherent. In the case where the paths 110 and 120 between nodes 101 and 102 were restored and the wait-to-restore time limit was reached, if the paths 110 and 120 between nodes 101 and 104 failed, node 101 would signal a line switch message along the long path towards node 102]**.

11. With regard to claim 26, Kremer discloses that the indication is carried over a Multiplex Section of Synchronous Digital Hierarchy or a Synchronous Optical Network of an exiting protection channel on the west side of said network element, said Multiplex Section including a first field for indicating said performed ring switch and including a second field for indicating said external command **[it is inherent in K1/K2 line switching that an acknowledgement is sent after receiving a line switch request utilizing in-band signaling (using path overhead bytes)]**.

Allowable Subject Matter

12. Claims 13 and 27 are objected to as being dependent upon a rejected base claim, but would Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Response to Arguments

13. Applicant's arguments with respect to claims 12-13 (and 23-27) have been considered but are moot in view of the new grounds of rejection.

Conclusion

14. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(a) Chapman (USP 5,974,027), Telecommunications network including channel switching protection arrangement.

(b) Taketomi et al. (USP 5,978,354), Optical transmission system and transmission switching control method.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Mais whose telephone number is 572-272-3138. The examiner can normally be reached on M-Th 5am-4pm.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAM
February 18, 2007

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER